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FIG. 1

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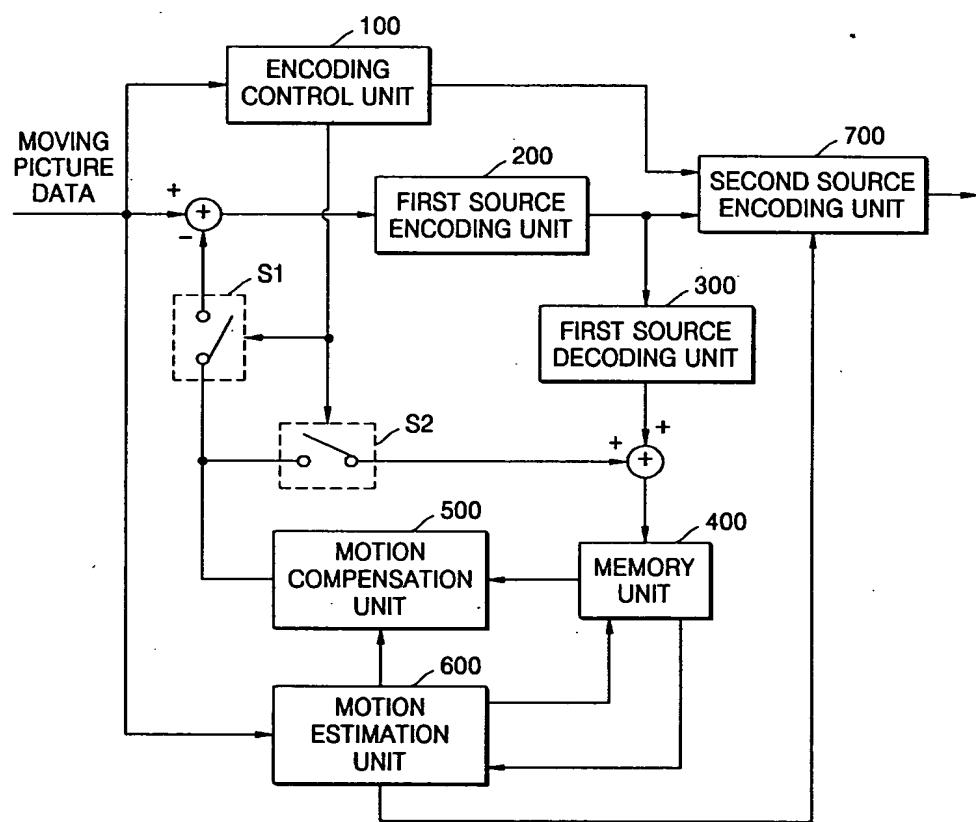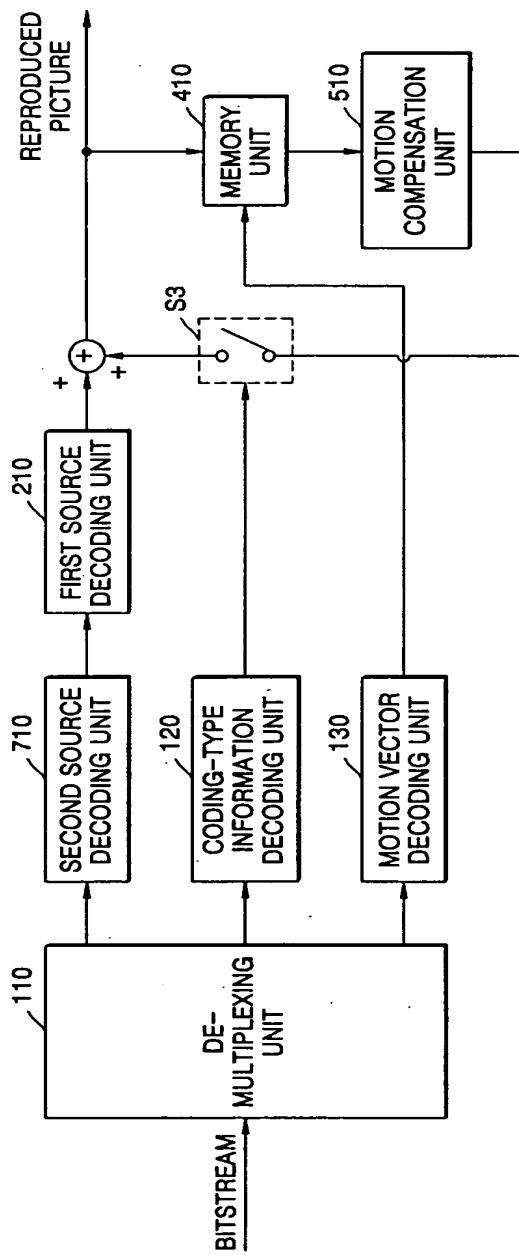2 OF 7

FIG. 2

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FIG. 3

I_0 B_1 B_2 B_3 P_4 B_5 B_6 B_7 P_8

FIG. 4

MB

SUB_MB

SUB_MB   SUB_MB
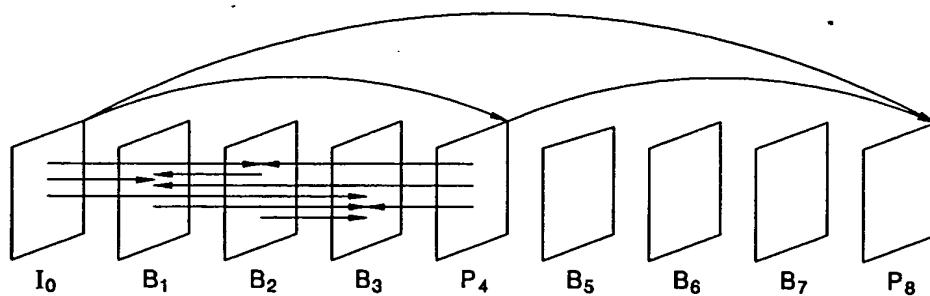
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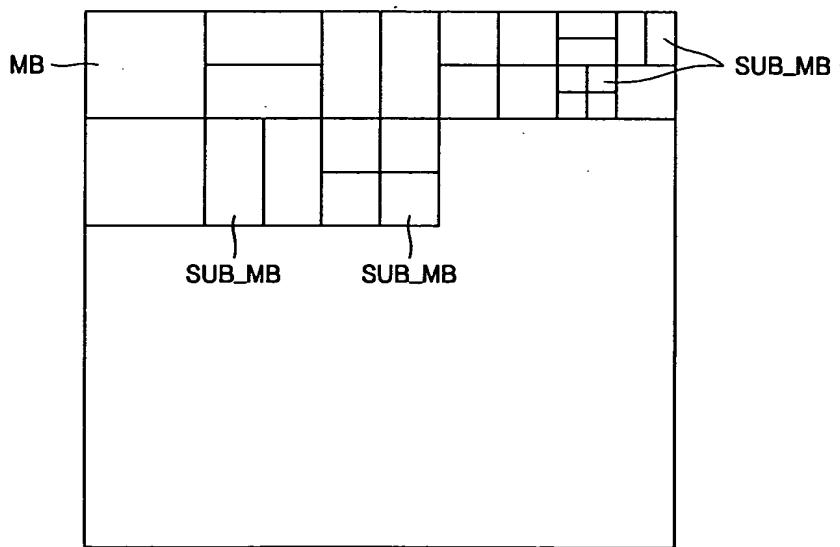4 OF 7

FIG. 5

PICTURE

TAG
INFORMATION

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FIG. 6

REFERENCE INDEX LIST

PICTURE IDENTIFIER | TAG INFORMATION

PICTURE

FIG. 7

big motion	element abrupt motion	sudden entrance	sudden exit	occlusion

global change	scene change	color change	illumination change	fading

FIG. 8

START

801 — PERFOMING MOTION ESTIMATION PROCESS BY USING RECENT PICTURE

802 — RESULT OF MOTION ESTIMATION PROCESS SATISFIES A PREDETERMINED CRITERION?

NO

804
DETERMINING REFERENCE PICTURE BY USING PICTURES LOADED ON REFERENCE INDEX LIST

YES

803 — RECENT PICTURE IS DETERMINED TO BE A REFERENCE PICTURE

END

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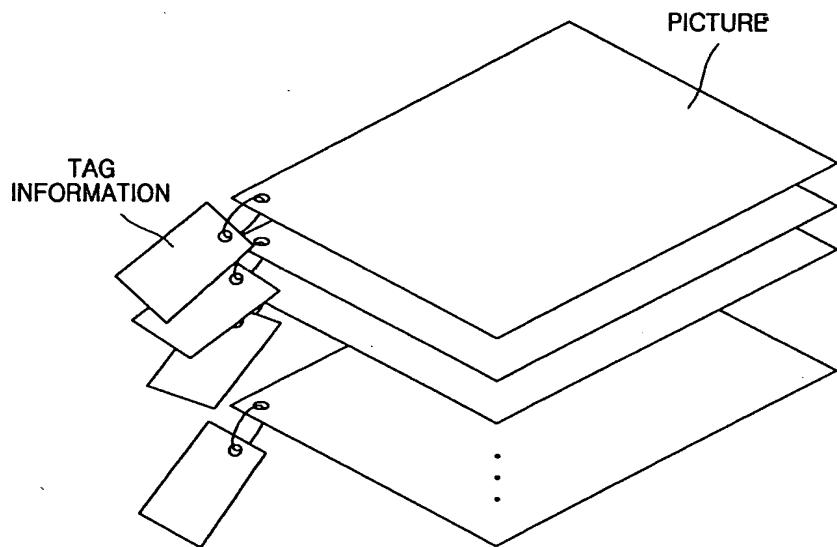Darryl Mexic 202-283-7060
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FIG. 9

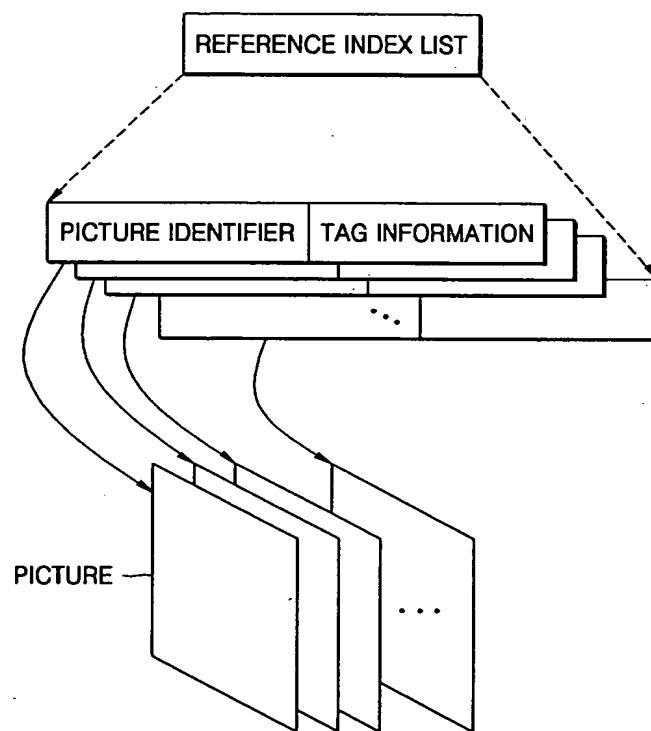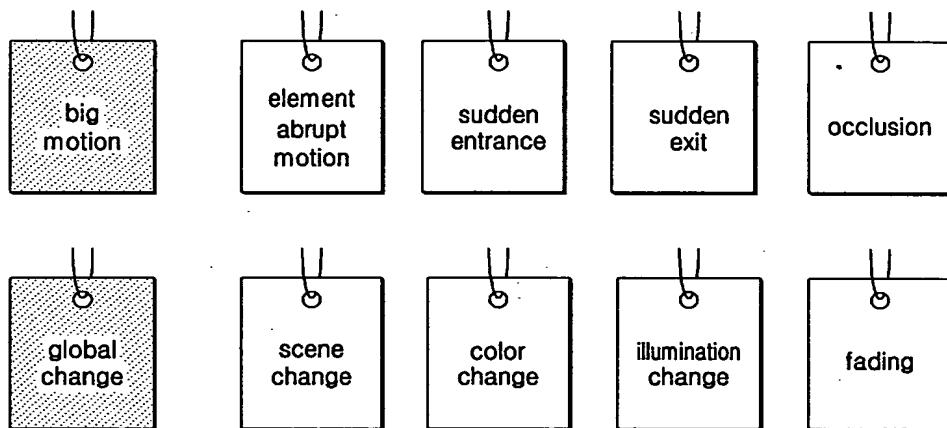START

901 — PERFORMING MOTION ESTIMATION PROCESS ON A PORTION OF BLOCKS BY USING ALL PICTURES LOADED ON REFERENCE INDEX PICTURE

902 — DETERMINING REFERENCE PICTURE BASED ON RESULT OF MOTION ESTIMATION PROCESS

903 — MONITORING DETERMINED REFERENCE PICTURE

904 — ASSIGNING PRIORITY

905 — IS PRIORITY ASSIGNED TO ONLY ONE PICTURE?

YES

NO

906 — PERFORMING MOTION ESTIMATION PROCESS ON OTHER PORTIONS OF BLOCKS IN ADVANCE BY USING PRIORITY-ASSIGNED PICTURES

908 — DETERMINING THE PICTURE TO BE REFERENCE PICTURE FOR OTHER PORTIONS OF BLOCKS

907 — DETERMINING PICTURE SATISFYING A PREDETERMINED CRITERION TO BE REFERENCE PICTURE

END